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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,489	04/28/2005	Torayuki Tsukada	10921.313USWO	4098
52835 7590 06/11/2008 HAMRE, SCHUMANN, MUELLER & LARSON, P.C. P.O. BOX 2902 MINNEAPOLIS, MN 55402-0902				
EXAMINER				
INGHAM, JOHN C				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/533,489

**Applicant(s)**

TSUKADA ET AL.

**Examiner**

JOHN C. INGHAM

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 March 2008.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 and 34 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-13, 16, 17 and 34 is/are rejected.  
7) ☒ Claim(s) 14 and 15 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 28 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 25 March 2008 has been entered.

### ***Terminal Disclaimer***

An application/patent being disclaimed (20 July 2007) has been improperly identified since the number used to identify the application being disclaimed is incorrect. The correct number is 10/517,943. A new Terminal Disclaimer with the correct number is required.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims **1-4 and 6-7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art (2002-57009, figure 37 and 38 referenced in instant specification), hereinafter AAPA, and Tsunoda (US 5,339,068).
5. Regarding claims **1-3 and 6**, AAPA discloses in Fig 37 a chip resistor comprising a chip resistor body having a front surface (top), a rear surface (bottom) provided at an interval in a thickness direction, a pair of side surfaces extending in a length direction at an interval in a width direction, and a pair of end surfaces (90C) provided at an interval in the length direction; a plurality of electrodes (91) provided in series on the rear surface of the resistor body at intervals in the length direction; a metal coating layer comprising a solder layer (92) covering a respective one of the electrodes.
6. AAPA does not specify wherein the metal coating layer covers a respective one of the end surfaces, a first insulation layer covers regions between the plurality of electrodes on the front surface and the rear surface of the resistor, a second insulation layer covering the pair of side surfaces of the resistor body, wherein each of the electrodes and the metal coating layer overlap a portion of the first insulation layer, said portion of the first insulation layer being inserted between the metal coating layer and

the rear surface of the resistor body, the metal coating layer extending beyond the respective electrode into direct contact with the first insulation layer.

7. Tsunoda teaches in Fig 15 a chip resistor having insulation layers (14) of an identical material covering the front, rear and side surfaces to shield the resistor body from the metal electrodes (col 2 ln 31-33 and ln 51-53). The metal electrodes (18 and a metal coating layer 19, solder layer) overlap a portion of the first insulation layer, said portion of the first insulation layer (14) being inserted between the metal coating layer (19) and the rear surface of the resistor body, the metal coating layer extending beyond the respective electrode into direct contact with the first insulation layer to minimize part-to-part changes in resistance (col 2 ln 26-28). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the teachings of Tsunoda on the AAPA in order to minimize part-to-part changes in resistance and shield the resistor body from the metal electrodes.

8. The language "the plurality of electrodes being formed by plating" describes a product-by-process. See MPEP 2113. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

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9. Regarding claim 4, Tsunoda teaches (col 9 ln 1-10) the resistor of claim 2, wherein each of the electrode (18 and 19) has a greater thickness than the first insulation layer (14).
10. Regarding claim 7, Tsunoda teaches the resistor of claim 1, wherein each of the electrodes is spaced from a respective end surface of the resistor body in the length direction (electrodes 18 are spaced from end surfaces by intervening layers 116, 11).

### ***Double Patenting***

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claims **1-6 and 34** are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 8-15 of copending Application No. 10/517,943. Although the conflicting claims are not identical,

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they are not patentably distinct from each other because the '943 application claims a chip resistor formed of metal with two insulator layers on upper and lower surfaces (between the electrodes at ends of the resistor), a third insulator layer on the sides, and a thicker electrode in relation to the insulator, which is on the surface of the resistor.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

13. Claims **8-13 and 16-17** are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 5 and 16-20 of copending Application No. 10/517,943. Although the conflicting claims are not identical, they are not patentably distinct from each other because the '943 application claims a manufacturing method for a chip resistor of metal where a lead frame or metal plate is used to produce a bar-form resistor, metal plating layers are provided as connection terminals, insulator layers are provided to cover the surfaces, the plate is divided into individual resistor elements, and the connecting portion of the frame is formed narrower than the plate portion.

This is a provisional obviousness-type double patenting rejection.

***Allowable Subject Matter***

14. Claims 14 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not disclose or make obvious the method of claim 14 and 15 wherein the step of forming a second insulation layer on the pair of side surfaces of each of the bar portions is performed after rotating the bar portions about a longitudinal axis extending in a predetermined direction by twisting a connecting portion between the bar portion and the support portion of the frame.

### ***Response to Arguments***

16. Applicant's arguments, see page 9, filed 25 March 2008, with respect to claims 8 and 11-12 have been fully considered and are persuasive. The 103 rejection of these claims and depending claims has been withdrawn.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN C. INGHAM whose telephone number is (571)272-8793. The examiner can normally be reached on M-F, 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (571) 272-1705. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Howard Weiss/  
Primary Examiner  
Art Unit 2814

John C Ingham  
Examiner  
Art Unit 2814

/J. C. I./  
Examiner, Art Unit 2814